

## Abstract

Various scholars have examined the association between knowledge sharing and innovation to examine the possible factors driving innovation behavior based on the individual's perception of it . The previous literature emphasizes that knowledge sharing, and innovation are strongly related. However, there is confusion on which factors may encourage individuals towards innovative behavior as macro factors and psychological factors are found insufficient as the dilemma in which “knowledge sharing” fails to generate “innovation results” exists. Thus, as evident in the literature, the macro-organizational factors that affect innovation are rarely addressed based on the organizational learning theory. Hence, this study attempts to discover the possible factors fostering knowledge sharing and Innovation behavior with the mediating effect of macro-organizational factors evident in edge organizations where individuals are empowered to operate reasonably autonomously with an encompassing vision in mind. The edge organizational factors identified based on previous literature includes “interoperability, robustness, competence, shared awareness, agility, decentralized knowledge and command, situational leadership, pull and smart, and network-centric focus” that would encourage knowledge-sharing across different generations as validated in extant literature.

Previous scholars have used different theories and concepts to explain this study context. Among those theories, the organizational learning theory can be identified as the dominant theory that is highlighted and related to the context of knowledge sharing in fostering Innovation behavior with psychological and organizational factors. However, the previous scholars criticize that this organizational learning theory frequently ignores the macro-level elements at an organizational and societal level that influence knowledge sharing and innovative behavior in favor of micro-level factors in individual and team-level considerations. Based on the detailed literature review, knowledge self-efficacy is a personal psychological factor affecting knowledge-sharing and innovation behavior as a determinant of Bandura’s self-efficacy theory of motivation (1977). Then, past studies identified prosocial motivation as an essential determinant influencing knowledge sharing across generations. Previous scholars have also used William's social network theory to investigate how behavioral change happens after socializing. It was found that knowledge sharing could also affect cross-generational biases, which can be applied to this association using the generation theory.

Therefore, based on this review, the mediating role of edge organization factors on the relationship between cross-generational knowledge sharing and Innovation behavior was hypothesized to predict organizational learning related to Innovation behavior.

The study applied a quantitative and cross-sectional design using a survey. The survey instrument was a structured questionnaire based on previously validated measurement scales. The study was done based on top levels of IT companies around the Colombo district which can be considered edge organizations that provide employees the autonomous working rights to work from home as a virtual network. The sample was chosen considering the purposive sampling method, and three hundred and eighty-two usable responses were collected. The data were analyzed utilizing structural equation modeling (SEM) using Smart PLS and SPSS-recommended two-step process to test the established hypotheses. The findings revealed that cross-generational knowledge sharing has a statistically insignificant impact on innovation behavior. Also, it was investigated that the edge organization factors partially mediate the cross-generational knowledge sharing and innovation behavior. Thus, this revealed a higher impact of the indirect effects of cross-generational knowledge sharing through edge organization factors on innovation behavior than the direct impact.

The contribution of this study can be related to several theoretical and managerial implications. This study validates the role of cross-generational knowledge sharing on Innovation behavior through the theory of organizational learning as it purifies the criticism of the undermined macro-level organizational factors adding edge organization factors that would improve innovative employee performance through knowledge sharing across generations. Further, this study emphasizes the edge factors that organizations could ascertain in their culture to enhance the innovation behavior of their employees by facilitating knowledge sharing across generations. This study would also provide insights to **policy makers** toward its sustainable vision of the experiment nation in 2030. Hence, this study proves the need for proper organizational level facilitation to foster inner change towards Innovation behavior of individuals through knowledge sharing across generations. In future investigations, acquiring samples from various industries using other sampling methods and data collection methods would generalize the findings of this topic, taking prosocial motivation and knowledge self-efficacy as mediators.